

SENIOR INSTRUMENT CONTROLS TECHNICIAN

DEFINITION

Under direction, to perform complex instrument and system maintenance and testing in an electric generating plant; to lead and direct a crew; and to do related work as required.

ESSENTIAL FUNCTIONS

Leads and coordinates the activities of a crew of Instrument Controls Technicians; programs, services, calibrates, troubleshoots, and repairs a variety of electronic, computerized, and pneumatic instruments, equipment, and systems; performs a variety of tests, including but not limited to, physical and chemical analysis and treatment; observes instruments; collects data; prepares and maintains a variety of written records both manually and electronically; cleans up and disposes of acids and other hazardous materials under the control of the instrument shop; operates a variety of electronic and computerized metering instruments and equipment; utilizes a variety of hand tools; operates motor vehicles; operates a computer with related software; assists in designing control and operating systems for boilers and related power plant equipment; performs system control and application software programming for controllers and computers; performs programming and hardware interface to new computer control installations; provides technical support for the installation and design of control system for new projects; prepares work schedules, cost estimates, reports, and related records; assists in the development and execution of efficiency and performance tests on machinery and equipment; assists in developing and implementing training programs; assists in administering maintenance management programs; evaluates employee performance.

MINIMUM QUALIFICATIONS

Employment Standards:

- Knowledge of - instrumentation, scales, and measurements; occupational hazards and safety procedures; principles of electronics, physics, chemistry and mathematics; characteristics of electronic and testing equipment; computer operation and use of control logic software; Windows NT, Wonderware and DeltaV software; testing techniques and procedures; applicable State and Federal legislation and rules; first aid.
- Skill in - effectively implementing the required knowledge; interacting and communicating tactfully and effectively with a culturally diverse population; discerning potentially dangerous situations; making independent judgements and decisions based upon standard policy or procedures.
- Ability to - learn, comprehend, and apply department and City policies, rules, and regulations; follow instructions and directions; write clear and accurate reports; operate a computer terminal and a variety of related software; utilize hand tools and specialized electronic instruments; observe instruments; work with fiber-optic networks and SCADA systems; safely collect and dispose of hazardous materials; safely operate motor vehicles; read, write, and communicate in English at an appropriate level; read schematic diagrams; cope with situations calmly and tactfully; work in and around a power generating plant, including work in confined spaces; perform essential functions; assign and direct the work of a crew efficiently; direct, train, and evaluate the work of subordinates; establish and maintain effective working relationships with supervisors, fellow employees, contractors, and the public.

Education/Training: Any combination of education and/or experience that has provided the knowledge, skills, and abilities necessary for acceptable job performance as determined by the City. Example combination includes, but is not limited to three years of college course work including chemistry, physics, and electronics and two years of recent experience in high pressure steam, power generating plant operations (minimum 400 lbs. boiler) OR two years of recent experience in control operation or instrument repair and calibration in a process industry or refinery. Experience in software based Distributive Controls Systems, specifically DeltaV version 5.3 and Foundation Fieldbus and additional busses such as Profibus and AS-i bus; ability to implement control strategies and modify logic tasks both in DCS and PLC systems.

Special Conditions & Requirements: Employees in this classification will be required to comply with the American National Standards Institute's requirements of Practices for Respiratory Protection.

License & Certificates: A valid California Class "C" driver's license or equivalent at time of appointment.

SUPPLEMENTAL INFORMATION

None.